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TORNOW, MARK W

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte STEPHEN FORREST and MARK E. THOMPSON¹

Appeal 2015-005314
Application 11/207,791
Technology Center 2800

Before CATHERINE Q. TIMM, MARK NAGUMO, and
WESLEY B. DERRICK, *Administrative Patent Judges*.

Opinion for the Board by TIMM, *Administrative Patent Judge*.

Opinion dissenting by NAGUMO, *Administrative Patent Judge*.

TIMM, *Administrative Patent Judge*.

DECISION ON APPEAL²

¹ Appellants identify the real party in interest as Global Photonics Energy Corporation. Br. 1.

² In our opinion below, we reference the Final Office Action mailed February 15, 2013 (Final), the Appeal Brief filed March 18, 2014 (Br.), and the Examiner's Answer mailed April 28, 2014 (Ans.).

STATEMENT OF CASE

Pursuant to 35 U.S.C. § 134(a), Appellants appeal from the Examiner's decision to reject claims 1–10, 12–15, 17–24, 26–50, and 52–56. We have jurisdiction under 35 U.S.C. § 6(b).

We AFFIRM.

The claims are directed to a photosensitive device (*see, e.g.*, claims 1, 27) and a method of making it (*see, e.g.*, claims 15, 35, 41). Claims 1 and 15 are illustrative:

1. A photosensitive device comprising:

an anode and a cathode;

a first organic material and a second organic material forming a donor-acceptor heterojunction electrically connected between the anode and the cathode, said first and second organic materials comprising planar molecules having fused rings, wherein the first and second organic materials, as arranged in the photosensitive device, each have a Franck-Condon Shift of less than 0.5 eV;

wherein the photosensitive device does not include an applied photovoltage.

Claims Appendix, Br. 21.

15. A method of making a photosensitive device comprising:

providing a first electrically conductive layer;

arranging a first organic material and a second organic material over the first electrically conductive layer to form a donor-acceptor heterojunction, said first and second organic materials comprising planar molecules having fused rings; and

forming a second electrically conductive layer over the first and second organic materials,

wherein each of the first and second organic materials have a Franck-Condon Shift of less than 0.2 eV, as arranged in the photosensitive device to form the donor- acceptor heterojunction, measured after the second electrically conductive layer is formed.

Claims Appendix, Br. 23.

The rejections maintained by the Examiner are listed in Appellants' Brief. Br. 8–9. There are two groups of rejections, which we summarize as follows.

(1) A rejection of claims 1–3, 5–8, 10, 12, 15, 17–24, and 27–50 under 35 U.S.C. § 103(a) as obvious over Epstein³ as evidenced by Halls⁴ and in view of Nijegorodov.⁵ Final 2–5. To reject further dependent claims, the Examiner adds various additional prior art references. Final 7–11.

(2) A rejection of claims 1–10, 12, 15, 17–24, and 27–50 under 35 U.S.C. § 103(a)⁶ as obvious over Tischler '924⁷ as evidenced by Tischler

³ Epstein et al., US 6,623,870 B1, issued Sep. 23, 2003.

⁴ Halls et al., WO 2004/006350 A2, published Jan. 15, 2004.

⁵ Nijegorodov, N. I., & Downey, W. S., The Influence of Planarity and Rigidity on the Absorption and Fluorescence Parameters and Intersystem Crossing Rate Constant in Aromatic Molecules, *The Journal of Physical Chemistry*, 98(22), 5639-5643 (1994).

⁶ As noted by Appellants, the Examiner mistakenly referred to 35 U.S.C. § 102(e) in the statement of the rejection. Br. 8 fn.1. Appellants requested clarification. *Id.* The Examiner responded that the misidentification of the statutory basis was a typographical error. Ans. 5. Appellants could have responded in a reply brief. Thus, the error was not harmful to Appellants. We further note that this error was also made in an earlier Final Office Action, dated March 16, 2012, and Appellants responded to the rejection then stating, *inter alia*, that “Tischler1, Tischler2, and Nijegorodov, taken alone or when combined, *do not render obvious*” the claims. Response filed September 17, 2012, pages 6–8 (emphasis added).

⁷ Tischler et al., WO 2006/137924 A2, published Dec. 28, 2006. Appellants refer to this reference as Tischler1.

'172⁸ and in view of Nijegorodov. Final 5–7. To reject further dependent claims, the Examiner adds various additional prior art references. Final 8–12.

OPINION

The rejections relying upon Epstein, Halls, and Nijegorodov

For the rejection of claims 1–3, 5–8, 10, 12, 15, 17–24, and 27–50 under 35 U.S.C. § 103(a) as obvious over Epstein as evidenced by Halls and in view of Nijegorodov, Appellants argue claims 1–3, 5–8, 10, 12, and 27–34 as a group and claims 15, 17–24, and 35–50 as a separate group. Br. 10–14. We select claims 1 and 15 as representative for resolving the issues on appeal.

Claim 1

The Examiner finds, and Appellants do not dispute, that Epstein's device has an anode and cathode as well as first and second organic materials forming a donor-acceptor heterojunction electrically connected as required by claim 1. *Compare* Final 3 *with* Br. 10–13. The Examiner further finds, and Appellants do not dispute, that the first and second organic materials have fused rings, and each organic material has a Franck-Condon Shift within the claimed range. *Compare* Final 3 *with* Br. 10–13.

The Examiner acknowledges that Epstein teaches using the device as a light emitting diode (LED), but the Examiner cites Halls as evidence that Epstein's structure is capable of being operated as a photosensitive device. Final 4.

⁸ Tischler et al., WO 2007/095172 A2, published Aug. 23, 2007. Appellants refer to this reference as Tischler2.

The Examiner further determines that the claim recitation “wherein the photosensitive device does not include an applied photovoltage” does not structurally distinguish the device of the claim from that of Epstein. Final 3.

The Examiner acknowledges that Epstein does not disclose that the fused rings of the organic materials are planar. Final 3–4. The Examiner, however, concludes that using planar fused rings would have been obvious to the ordinary artisan based upon the teachings of Nijegorodov. Final 4–5.

Appellants fault the Examiner’s interpretation of “wherein the photosensitive device does not include an applied photovoltage,” the Examiner’s application of Halls to establish that Epstein’s device has the structure required of a photosensitive device, and the Examiner’s reliance on Nijegorodov to support the obviousness of using planar molecules in Epstein’s organic materials. Br. 10–13.

We agree with the Examiner’s responses (Ans. 2–4) to Appellants’ arguments, and add the following primarily for emphasis.

The first issue that arises turns on claim interpretation. The question is whether the language “wherein the photosensitive device does not include an applied photovoltage” structurally limits the device of claim 1 in a way that structurally distinguishes the claimed device from that of Epstein.

To support their argument that this limitation is a structural limitation, Appellants rely on an analogy to a house that does not include a front door (Br. 11), but we agree with the Examiner that this analogy is flawed. Ans. 2. A door is a structure. There is no convincing evidence that an applied photovoltage is a structure.

Further, Appellants appear to contend that the claim language somehow excludes the source of electrical current that would be required to operate Epstein’s device as a light emitting device. But claim 1 does not

exclude the presence of an electrical current source, it only excludes an “applied photovoltage.”

In order to determine the scope of what is excluded, we first consider the broadest reasonable meaning of “applied photovoltage” as understood by those of ordinary skill in the art, taking into account whatever enlightenment may be afforded by the written description of the invention in Appellants’ Specification. *In re Morris*, 127 F.3d 1048, 1054 (Fed. Cir. 1997). We note that the Specification does not use the word “photovoltage,” much less the phrase “applied photovoltage.”⁹ Merriam-webster.com defines “photovoltage” as “electromotive force developed by a photosensitive device as a result of the incidence of radiant energy.” Merriam-webster.com/dictionary/photovoltage. Thus, it appears that “applied photovoltage” refers to applying radiant energy to the device in a way that develops an electromotive force. It is applied radiant energy (light) that results in an electromotive force, not a source of electrical current.

We agree with the Examiner, that the limitation excluding the application of a photovoltage fails to set forth a patentably significant structural difference because the difference amounts to a difference in the intended use of the device. Final 4. Leaving the device in the dark so that no photovoltage is applied does not amount to a structural difference in the device. Whether the device is in a dark room or a lighted room, the structure of the device is the same: it amounts to an anode, a cathode, and the organic materials arranged as required by the claim.

⁹ We, like our dissenting colleague, do not review the question of whether there is written descriptive support for the negative limitation in the Specification as originally filed. This is because the question is not before us: No rejection on that basis has been made. We make no assumptions about whether the Examiner considered the question.

Moreover, an electromotive force is not structural distinction. “A transitory signal made of electrical or electromagnetic variances is not made of “parts” or “devices” in any mechanical sense.” *In re Nuijten*, 500 F.3d, 1346, 1355 (Fed. Cir. 2007). A force that causes the movement of excitons and electrons is not even a signal much less a structure.

Further, whatever the import of an applied photovoltage, we are directed to no persuasive evidence or argument that the skilled artisan having been led to a device with an applied photovoltage would not have concomitantly been led also to a device according to the claim lacking an applied photovoltage when the device is not in operation.

The Examiner has also provided sufficient evidence to support the finding that the word “photosensitive” in claim 1 does not patentably distinguish the claimed device from the device of Epstein. The word “photosensitive” is defined as “sensitive to the action of radiant energy.” Merriam-webster.com/dictionary/photosensitive. Appellants’ Specification states that “[p]hotosensitive optoelectronic devices convert electromagnetic radiation into an electrical signal or electricity.” Spec. ¶ 5. The Examiner relies on Halls to show that Epstein’s device is capable of operating in the required manner of a photosensitive device given the arrangement of the organic materials between an anode and cathode. Final 3–4; Ans. 2–4. Halls supports the finding. *See* Halls, p. 2 (explaining that it was known in the art that the same organic light emitting materials could also be used to detect light and displays were known that operated to emit light when forward biased and operated to detect light when reverse biased). The Examiner’s reasonable finding shifted the burden to Appellants to show that Epstein’s structure does not inherently possess the capability of functioning as a photosensitive device. *See In re Schreiber*, 128 F.3d 1473, 1478 (Fed.

Cir. 1997). Appellants provide no convincing evidence that the word “photosensitive” implies a structure that is not recited in the body of claim 1 or that something more than the two organic materials between an anode and cathode as taught by Epstein is required.

As stated by the Examiner, Halls in not being used in the rejection to support a finding of a suggestion to modify the structure of Epstein. Halls is applied as evidence that Epstein’s device is inherently capable of operating as a photosensitive device. Thus, Appellants’ arguments directed to a motivation to combine and teaching away are not persuasive as they are directed to an obviousness rationale not relied on by the Examiner.

Appellants’ argument (Br. 12–13) that one of ordinary skill in the art at the time of the invention would not have had a reasonable expectation of success when applying Nijegorodov’s teachings to Epstein’s organic material also fails for the reasons provided by the Examiner. Ans. 4. Nijegorodov provides evidence that planarity and rigidity play important roles in the fluorescence parameters of the materials and discloses predictable effects on at least some properties, such as Stokes Shift. Nijegorodov, p. 5639, col. 1 ¶ 2 (Introduction); p. 5643, col. 1, ¶ 1 (Conclusion).

Appellants’ argument rests on a statement in Nijegorodov that “[t]he values of the quantum yields and decay times do not behave in a predictable manner.” Br. 13 (citing Nijegorodov, p. 5643, col. 1, ¶ 1, ll. 8–10 (Conclusion)). But this statement should not be viewed out of context. The statement applies to the 23 aromatic molecules of differing degrees of planarity and rigidity that Nijegorodov tested and how those degrees of planarity and rigidity influence their fluorescence properties. Nijegorodov, p. 5639, col. 2, ¶ 1. Nijegorodov merely failed to find a predictable pattern

of change in quantum yield amongst the 23 molecules as planarity and rigidity increased. On the other hand, the portion of Nijegorodov cited by the Examiner states that:

Very often, transition from a nonplanar molecule to a similar but more planar and rigid molecule is accompanied by an increase in quantum yield of fluorescence. These conditions have been shown previously by numerous investigators and have been summarized in a number of monographs.¹⁻⁵

Nijegorodov, p. 5639, col. 1 ¶ 1, ll. 9–14 (Introduction). Thus, it was known that for some molecules, quantum yield increases when the molecular is made more planar. Nijegorodov then discusses biphenyl as an example of a molecule that when forced into a planar position by bridging with the introduction of a methylene group (fluorine) causes the absorption and fluorescence spectra to sharpen and the quantum yield values to increase from 0.18 to 0.80. Nijegorodov, p. 5639, col. 1 ¶ 1, ll. 14–21 (Introduction). Nijegovodov as a whole indicates that there was recognition in the art that there were known planar molecules with predictable and known quantum yields.

What is “unpredictable,” according to Nijegovodov is merely the effect of increasing planarity and rigidity on quantum yield: it does not follow a predictable pattern for the 23 molecules tested. Nijegovodov, p. 5641, Table 1 (γ values). But this is beside the point as it fails to set forth any unpredictability in the use of the tested molecules. Nijegovodov reports quantum yields for each of the 23 tested molecules. They have known quantum yields. They also have fluorescence properties albeit in different degrees. Nijegovodov does not report that any of the planar molecules fail to have the adequate fluorescence. “For obviousness under § 103, all that is required is a reasonable expectation of success.” *In re O’Farrell*, 853 F.2d

894, 903-04 (Fed. Cir. 1988) (citations omitted). There is a reasonable expectation that all of the molecules will have adequate fluorescence to function as desired even if some function better than others. Obviousness does not require the selection be the *most* desirable. *In re Fulton*, 391 F.3d 1195, 1200 (Fed. Cir. 2004); *see also Merck & Co v. Biocraft Laboratories*, 874 F.2d 804, 807 (Fed. Cir. 1989) (“in a section 103 inquiry, ‘the fact that a specific [embodiment] is taught to be preferred is not controlling, since all disclosures of the prior art, including unpreferred embodiments, must be considered.’”). Nijegovodov also discloses that other properties, such as Stoke Shift, were improved amongst the 23 molecules tested.

A preponderance of the evidence supports the Examiner’s findings and conclusions regarding the obviousness of the device of claim 1.

Claim 15

Claim 15 is directed to a method of making a photosensitive device with steps of forming a first electrically conductive layer, arranging first and second organic materials over the first electrically conductive layer to form a donor-acceptor heterojunction, and forming a second electrically conductive layer. Similarly to claim 1, the first and second organic materials comprise planar molecules having fused rings and a Franck-Condon Shift in a particular range.

Appellants contend that Epstein does not disclose methods for making light sensing devices, but merely discloses *light emitting devices* and Halls fails to make up for this deficiency for the reasons Appellants stated in arguing against the rejection of claim 1. For the reasons stated by the Examiner, and the reasons we stated above, we do not find Appellants’ arguments persuasive. Although Epstein calls the device a light emitting device, the Examiner has provided evidence that the device of Epstein is

inherently capable of operating as a photosensitive device. Appellants have not overcome the Examiner's reasonable finding with evidence showing that the device would not have this capability or otherwise shown the device is, in fact, patentably different.

Further Rejections

Appellants rely on the reasons they presented against the rejection over Epstein as evidenced by Halls, and in view of Nijegorodov without advancing any separate arguments against the further rejections of dependent claims. Br. 17–19. For the reasons we stated above, we do not find these arguments persuasive of reversible error in the Examiner's rejections.

The rejections over Tischler '924, Tischler '172, and Nijegorodov

The Examiner rejects claims 1–10, 12, 15, 17–24, and 27–50 as obvious over Tischler '924 as evidenced by Tischler '172 and in view of Nijegorodov. Final 5.

As an initial matter, Appellants contend the rejection is in error because the Examiner stated the statutory basis as under 35 U.S.C. § 102(e) instead of under 35 U.S.C. § 103(a). Although Appellants are correct that the Examiner misidentified the statutory basis, as Appellants recognized in their Brief this was an obvious error. Br. 8, fn.1. The rejection included an obviousness analysis. Final 7. The Examiner verified that 35 U.S.C. §103(a) was intended. Ans. 5. Because Appellants had an opportunity to respond by way of reply brief, and had recognized the rejection as based on obviousness earlier in prosecution and had responded to it as such, the error was not harmful to Appellants. Thus, the error was not a reversible error.

Appellants argue claims 1–10, 12, and 27–34 as a group and claims 15, 17–24, and 35–50 as a separate group. Br. 15–17. We select claims 1 and 15 as representative.

Claim 1

Appellants again urge that “wherein the photosensitive device does not include an applied photovoltage” is a structural limitation that serves to define the device. Br. 15. For the reasons we stated above, we disagree.

Appellants contend that the device of Tischler ’924 “does not disclose all of the structural limitations” because the device of Tischler is electrically driven and the electrodes (anode and cathode) can contact a power supply to provide a voltage across the structure. Br. 15–16. But claim 1 does not exclude contact with a power supply. The claim recites that the “photosensitive device does not include an applied photovoltage.” This refers to applying light, not electricity to create an electromotive force. Moreover, even if the claim recited that the device does not include an “applied voltage”, switching on and off an applied voltage would not change the underlying structure of the device.

Appellants also contend that the Examiner cannot rely on Tischler ’172 “to cure the deficiencies of Tischler ’924 because this contradicts the law of anticipation.” Br. 16. The Examiner relied upon Tischler ’172 in a similar manner to Halls to support a finding that the device of Tischler ’924 has the necessary structure for operating as a photosensitive device. Final 5–7. The Examiner’s use of Tischler ’172 was permissible. First, the rejection is an obviousness rejection. Second, even under an anticipation analysis, the use of Tischler ’172 is permissible. *See In re Baxter Travenol Labs.*, 952 F.2d 388, 390 (Fed. Cir. 1991) (“extrinsic evidence may be considered when it is used to explain, but not expand, the meaning of a reference”).

Appellants' argument against the Examiner's use of Nijegorodov to support the obviousness conclusion fails because the rejection is based on obviousness, not anticipation. Although the Examiner cited to 35 U.S.C. §102(e) in the rejection heading, the Examiner included an obviousness analysis that Appellants had the opportunity to respond to in a reply brief.

Claim 15

For the reason stated above, Appellants' arguments fail. The rejection is based on obviousness, not anticipation.

Further Rejections

Appellants rely on the reasons they presented against the rejection over Tischler '924 as evidenced by Tischler '172, and in view of Nijegorodov without advancing any separate arguments against the further rejections of dependent claims. Br. 17–19. For the reasons we stated above, we do not find these arguments persuasive of reversible error in the Examiner's rejections.

CONCLUSION

We sustain the Examiner's rejections.

DECISION

The Examiner's decision is affirmed.

Appeal 2015-005314
Application 11/207,791

TIME PERIOD FOR RESPONSE

No time period for taking any subsequent action in connection with this appeal may be extended under 37 C.F.R. § 1.136(a)(1).

AFFIRMED

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE PATENT TRIAL AND APPEAL BOARD

Ex parte STEPHEN FORREST and MARK E. THOMPSON

Appeal 2015-005314
Application 11/207,791
Technology Center 2800

Opinion dissenting by NAGUMO, *Administrative Patent Judge*.

On appeal, the Appellant bears the burden of showing error in the rejections maintained by the Primary Examiner. Because I conclude that Appellant has carried that burden with respect to Nijegorodov, I dissent, respectfully, from the decision that the rejections should be affirmed.

A critical issue, as my colleagues state (Op. 5), is claim construction. My colleagues ask, does the phrase, “wherein the photosensitive device does not include an applied photovoltage,” structurally limit the claims to the device? (*Id.*) This inquiry is not inapposite, but I would ask, instead, “have Appellants shown that the applied prior art is excluded by this limitation? Thus, I arrive at the same conclusion with respect to Epstein, Halls, and the Tischler references, but via a somewhat different route.

The inquiry begins with an assessment of the scope and content of the claimed subject matter. Photosensitive devices covered by claim 1 comprise a donor-acceptor heterojunction formed by two organic materials connected

electrically between an anode and a cathode. Claim 1 requires further that each of the first and second materials, as arranged in the device, have a Franck-Condon shift of less than 0.5 eV. Finally, claim 1 excludes expressly any such photosensitive device that “includes an applied photovoltage.”

This final limitation is functional. As the predecessor to our reviewing court explained over 45 years ago, “[f]unctional” terminology may render a claim quite broad. By its own literal terms a claim employing such language covers any and all embodiments which perform the recited function.” *In re Swinehart*, 439 F.2d 210, 213 (CCPA 1971). Thus, claim 1, by its plain language, only excludes devices meeting the express limitations that include a photovoltage applied to any part of the device by any means.¹⁰

The Examiner finds, and Appellants do not contest, that the expressly recited structures in claim 1 are found in Epstein. (Final Act. 3.) The Examiner concludes that the structures in Epstein have the same properties, and cites Halls as evidence that a light-emitting device can be a photosensitive device. Thus, in the Examiner’s words, the structure described by Epstein, “can be used as either a light emitting device or a photosensitive device, merely by operating it backwards. This is not a structural difference, but rather *intended use*.” (*Id.* at 4, ll. 14–16.)

The major difficulty with Appellants’ arguments regarding this aspect of the case is that Appellants do not relate their arguments to the requirement

¹⁰ I do not disturb, but I do not decide, the Examiner’s apparent finding that this negative limitation is adequately described by the Specification as originally filed. As my colleagues point out, however, the term “photovoltage” does not appear in the Specification. (Op. 6, ll. 7–9). In this regard, it may be noted that the Specification teaches that “[a] photodetector has at least one rectifying junction and is usually but not always operated with a bias.” (Spec. 2 [0006].)

that the claimed “photosensitive device does not include an applied photovoltage.” Patentability cannot be established by arguing limitations that are not recited in the claims. *See, e.g., In re Self*, 671 F.2d 1344, 1348 (CCPA 1982) (“Many of appellant’s arguments fail from the outset because . . . they are not based on limitations appearing in the claims.”)

More particularly, Appellants’ “front-door” argument-by-analogy regarding the construction of the claims is inapposite to the purely functional character of the no-applied-photovoltage limitation. Furthermore, Appellants do not raise persuasive arguments based on this limitation. They urge, for example, that “*Epstein* discloses a light emitting device that requires a source of electrical current. In clear contrast, the light sensing device, i.e., the photosensitive device, recited in claims 1 and 27 does not include an applied voltage.” (Br. 11, ll. 19–21.) The claims, however, exclude only devices that apply a photovoltage. Appellants’ additional arguments that Halls teaches away from operating a light emitting device “‘backwards,’ whatever that may mean” (*id.* at 12, ll. 17–19) are not persuasive because Appellants do not relate the arguments to any limitation in claim 1. Moreover, Appellants’ arguments that Halls “teaches away” from operating a device as a light-emitting device and as a light-sensing device because Halls teaches that the device cannot be operated efficiently in those two modes (Br. 12) does not address the Examiner’s determination that the device described by Epstein functions inherently as a light sensor. Patentability cannot be established by arguing limitations that are not recited in the claims.

The arguments based regarding the teachings of Nijegorodov stand somewhat differently. The Examiner cites parts of the first two paragraphs of the first column of this reference as evidence that “planar rigid molecules

with fused rings are advantageous over non-planar and non-rigid counterparts.” (Final Act. 4, last para.) Appellants, in contrast, cite the conclusion of Nijegorodov, which states that “values of the quantum yields and decay times do not behave in a predictable manner.” (Br. 13, ll. 4–6, quoting Nijegorodov, 5643, left col., ll. 8–10.) Neither the Examiner nor Appellants provide much analysis of the basis of these statements. Review of this reference indicates, however, that, in Nijegorodov’s view, “not all the effects of these factors [planarity and rigidity] have been properly investigated.” (Nijegorodov 5639, right col., ll. 1–2.) Nijegorodov “presents . . . a thorough analysis of the fluorescence properties of 23 specially chosen substances, different in degrees of planarity and rigidity but family-related in π -structure.” (*Id.* at ll. 5–8.)

It is improper to rely on only the parts of a reference that support a position, while ignoring those parts of the reference that detract from that support. In the present case, Nijegorodov indicates that the general proposition that planarity and rigidity increase quantum yields of fluorescence in molecules is not controlling, and that there are other factors that must be considered. Considering the generality of the Examiner’s reliance on Epstein for fluorescent molecules (none of which comprise planar molecules having fused rings), the weight of the evidence of record is that Nijegorodov would not have provided the person having ordinary skill in the art with a reasonable expectation of successfully substituting some planar fused ring version of a compound to achieve a higher quantum yield.

I would therefore reverse the rejections based on the combined teachings of Epstein, Halls, and Nijegorodov.

The rejections in view of the Tischler references (collectively, “Tischler”) stand somewhat similarly. Appellants state expressly that

“*Tischler* 1 does not disclose the recited structural limitation in claims 1 and 27 that the claimed photosensitive device does not include an applied photovoltage” (Br. 16, ll. 4–6), and argue further that “whatever *Tischler*2 may teach remains irrelevant to this anticipation analysis” (*id.* at ll. 18–19).

The failure of a reference to teach a negative is not fatal to a rejection. The critical point, however, is that Appellants’ argument does not show why *Tischler* teach or suggest a photosensitive device that is excluded by the claims, i.e., a photosensitive device that includes an applied photovoltage.

In any event, because Appellants have shown the Examiner’s findings regarding Nijegorodov to be harmfully erroneous, I would reverse the rejections based on *Tischler* and Nijegorodov as well.